DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006535 Address: 333 Burma Road **Date Inspected:** 12-Apr-2009

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: ZPMC and ABF **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** SAS tower

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance(QA) Inspector, Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay #10 South and North Tower Shop

South Tower Lift #2:-Caltrans QA Inspector observed six ZPMC workers and two welders performed grinding and FCAW repair welding process on the fig lug welds and diaphragm welds. The fig lug welds and diaphragm welds are located at elevation 53m to 80.75m interior diaphragm of skin C and D. The grinding and welding process are removing and repair the fillet welds that have been rejected by VT inspection. Base on Caltrans observation, no discrepancies were noted.

South Tower Lift #2:-Caltrans QA Inspector observed two welders performed FCAW repair process on inner corner longitudinal seam weld that connected skin plate B and C. The repair weld area located at elevation 53m and 62m diaphragm section. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

South tower lift #1:- Caltrans QA inspector performed final VT and dry MT inspection on the weld # SSD1-SA16A-38~41, 32~35, 17 and SSD1-SA16F/G-89, 90. The connection plates are attached to the stiffeners of skin A located at elevation 3.125m to 9m diaphragm section. All the fillet welds for VT inspection have been accepted by ZPMC and ABF QC prior Caltrans QA inspection. Base on Caltrans inspection, the fillet welds on the connection plates appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract

WELDING INSPECTION REPORT

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documents.

Bay #11 East and West Tower Shop

East Tower Lift#1:- Caltrans QA Inspector observed seven welders performed FCAW process on PJP weld for corner diagonal stiffener that connected skin plate C to D and B to C. The welding located at elevation 9m to 47. 6m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW PJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East Tower Lift #2:-Caltrans QA Inspector observed four ZPMC workers performed grinding process on the fig lug welds and diaphragm welds. The fig lug welds and diaphragm welds are located at elevation 53m to 80.75m interior diaphragm of skin C. The grinding process is removing the weld profiles that have been rejected by VT inspection. Base on Caltrans observation, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer